

Application No. 10/625,633  
Amendment Dated June 22, 2007  
Reply to Final Office Action of March 26, 2007

Claims 2, 3, and 5-10

Claims 2, 3, and 5-10 are all directly or indirectly dependent from independent claim 1 which is believed allowable. As such claims 2, 3, and 5-10 are also believed allowable for the reasons stated above as well as the subject matter recited therein.

Claim 11

Claim 11 has been amended to add the further steps of applying at least one rule-based algorithm from a second set of rule-based algorithms to the acquired data; generating a second diagnostic interpretation based on the application of the at least one rule-based algorithm from the second set to the acquired data; and displaying the second diagnostic interpretation to the clinician.

The steps of the method as claimed in currently amended claim 11 are not taught and/or anticipated by the disclosure of Cairnes. While the Examiner points to the same lines of disclosure at column 4, lines 27-39 as teaching the application of a first rule set to generate a first diagnostic interpretation and a second rule set to generate a second diagnostic interpretation, the Applicant respectfully asserts that the application of multiple sets of rules to physiological data to produce at least two diagnostic interpretations of the physiological data is not taught by Cairnes. At most, Cairnes discloses the application of a set of rules to produce at least one therapy for the patient. This disclosure is only the first part of the method as claimed in claim 11. Cairnes does not teach the continue of at least the method as claimed by then applying a second set of rules to generate a second diagnostic interpretation of the patient physiological data.

Claims 12-14, 16, 17, 20, and 69-71

Claims 12-14, 16, 17, 20, and 69-71 depend directly and/or indirectly from presently amended claim 11 which is herein believed allowable. As such, claims 12-14, 16, 17, 20, and 69-71 are also believed allowable for the reasons stated above as well as the subject matter recited therein.

Claim 66

Presently amended claim 66 recites a method for monitoring a patient comprising the steps of selecting a first rule set, applying the first rule set to the acquired data, displaying at least one first diagnostic interpretation based upon the first rule set, receiving a selection of one of the first diagnostic interpretations, selecting a second rule set based on the selected first diagnostic interpretation, applying the second rule set to the acquired data, and displaying at least one second diagnostic interpretation. The steps of the method as claimed in claim 66 are not taught by Cairnes as the reference does not teach of the selection of a second rule set based on the application of a first rule set, nor does Cairnes teach of the application of a second rule set to the collected physiological data in order to produce at least one second diagnostic interpretation.

The disclosure of Cairnes teaches the application of a plurality of rules to produce one or more therapies for a patient. Cairnes fails to teach any relationship between the therapies derived by different rules of the plurality of rules as applied in Cairnes. As such, Cairnes cannot anticipate the invention as claimed in claim 66. Therefore, claim 66 is believed allowable over the disclosure of Cairnes.

Claim 67

Claim 67 depends directly from independent claim 66 which is believed allowable. Therefore, claim 67 is also believed allowable for the reasons stated above as well as the subject matter recited therein.

Claim 72

Newly presented claim 72 recites a method for diagnosing a medical condition of a patient, the method comprising: acquiring patient data; applying a first rule set to the acquired patient data, the first rule set comprising a plurality of rule-based algorithms directed to producing at least one general diagnostic interpretation of the patient data based upon the application of the first rule set; evaluating the at least one general diagnostic interpretation to select a second rule set comprising a plurality of rule-based algorithms

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directed to producing at least one specific diagnostic interpretation; applying the selected second rule set to the acquired patient data; generating at least one specific diagnostic interpretation of the patient data based on the application of the second rule set; and displaying at least one specific diagnostic interpretation of the patient data based upon the application of the second rule set.

Cairnes fails to teach the method as claimed in claim 72 as Cairnes fails to teach the application of a first rule set to produce at least one general diagnostic interpretation of the patient data and the selection of a second rule set based on the at least one general diagnostic interpretation of the patient data and then applying the selected second rule set to the acquired patient data to produce at least one specific diagnostic interpretation of the patient data. Cairnes does not teach or disclose the application of multiple sets of rules to provide increasing specificity of diagnostic interpretations with the application of each set of rules. The application of a plurality of clinical case management rules to produce at least one therapy as taught by Cairnes does not anticipate the application of a first rule set in order to determine which second rule set should be applied to produce a second diagnostic interpretation. While Cairnes teaches the generation of a diet therapy, and exercise therapy, and/or a smoking cessation therapy, these therapies are independent of each other and as such the generation of these therapies does not anticipate the generation of the first and second diagnostic interpretations as claimed in claim 72.

As such, independent claim 72 is believed allowable.

#### Claims 22, 24, 25, 27, 28 and 73

Claims 22, 24, 25, 27, 28, and 73 all dependent directly and/or indirectly from newly presented claim 72, which is believed allowable. As such, claims 22, 24, 25, 27, 28, and 73 are believed allow for the reasons stated above as well as the subject matter recited therein.

#### Claim 74

Newly presented claim 74 recites a method of monitoring a medical condition of a patient wherein after acquiring physiological data from a plurality of sensors, the physiological data is analyzed and used to select a first rule set from a plurality of rule sets.

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This first rule set is applied to the physiological data to generate a first diagnostic interpretation based on the application of the first rule set to the physiological data. Next, a second rule set is selected from the plurality of rule sets and applied to the acquired physiological data in order to generate a second diagnostic interpretation based on the application of the second rule set to the physiological data. Finally, the method concludes by receiving a clinician selection of a diagnostic interpretation from between the first diagnostic interpretation and the second diagnostic interpretation.

The method as claimed in claim 74 is not anticipated by Cairnes as Cairnes fails to teach every step of the method as newly claimed. Specifically, Cairnes does not teach the steps of analyzing the acquired physiological data and selecting a first rule set from the plurality of rule sets based on the acquired physiological data. Furthermore, Cairnes fails to teach applying this first rule set to the acquired physiological data to generate a first diagnostic interpretation, selecting a second rule set from the plurality of rule sets, applying the second rule set, and generating a second diagnostic interpretation. Cairnes merely teaches the application of a single set of rules from a database to produce recommended therapies that are displayed to a patient. Cairnes does not teach a system that performs a selecting process whereby in generating a first and a second diagnostic interpretations, first and second rule sets are selected from a plurality of rule sets.

Finally, Cairnes fails to teach receiving a clinician selection of a diagnostic interpretation from between the first diagnostic interpretation and the second diagnostic interpretation. Cairnes only teaches of displaying a generated therapy to a patient and does not teach the display of the therapy to the clinician, nor the selection of multiple different therapies by the clinician. While the Examiner has cited column 7 lines 60-63 “decision support software typically resides in workstation of PHA. Software recommends therapies based upon the analysis of sign and symptom data a patient sends to PHA.” Applicant respectfully disagrees with the Examiner’s indication that the clinician and the PHA are interchangeable and/or the same for purposes of the teaching of Cairnes. Applicant points to Figure 5 of Cairnes which depicts an example clinical integrated tele-informatic data pie chart with three distinct segments comprising a PHA 120, a patient 108, and health service providers 136. Therefore, the PHA and the healthcare service providers (clinicians) are

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distinct components of the system as taught in Cairnes. As such, tasks performed by the PHA in Cairnes do not anticipate a clinician interpreting and selecting a diagnostic interpretation from between the first and second diagnostic interpretations as claimed in claim 74.

As such, claim 74 is believed allowable.

#### Claims 60, 61, and 75

Claims 60, 61, and 75 depend directly and/or directly from independent claim 74, which is herein believed allowable. Therefore, claims 60, 61, and 75 are believed allowable for the reasons stated above as well as subject matter recited therein.

#### Claim 76

Newly presented claim 76 claims a system for using rule-based algorithms that comprises a data storage device configured to store a plurality of rule sets comprising a plurality of rule-based algorithms, a data acquisition device configured to acquire data from a patient, a controller that receives and processes the acquired data, a first logic configured to select a first rule from the data storage device to be applied to the acquired data the rule set being selected based on the acquired data, and a second logic configured to select a second rule set from the data storage device to be applied to the acquired data, the second rule set being selected based on the acquired data; wherein the controller receives the selected first rule set and second rule set, applies the first rule set to the acquired data to produce a first diagnostic interpretation of the acquired data, and applies the second rule set to the acquired data to produce a second diagnostic interpretation of the acquired data.

Cairnes fails to teach the application of at least a first and a second rule set to the physiological data with the application of each rule set resulting in a diagnosis. Cairnes merely teaches the application of a plurality of rules resulting in at least one therapy. However, there is no relationship between the one or more therapies derived by the application of the plurality of rules. As is specifically claimed in claim 76, each rule set comprises a plurality of rules. Therefore, the reference cited by the Examiner "...a plurality of clinical case management rules....at least one therapy..." only teaches of one of the rule

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sets comprising a plurality of rules as claimed in claim 76. Nowhere in the disclosure of Cairnes is the concept of a second rule set with a plurality of rules to be applied to the physiological data.

As such, claim 76 is believed allowable.

Claims 33, 35, 38, 42, 45, and 63

Claims 33, 35, 38, 42, 45, and 63 have been rejected under 35 U.S.C. §102(b) as being anticipated by Walker et al. By the present amendment claims 33, 35, 38, 42, 45, and 63 have been cancelled and therefore render this rejection by the Examiner moot.

Claims 38 and 42

Claims 38 and 42 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Cairnes in further view of Walker et al. By the present amendment, claims 38 and 42 have been cancelled and as such the Examiner's rejection of these claims is thus rendered moot.

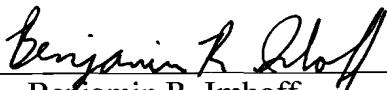
Conclusion

The present application is thus believed in condition for allowance with claims 1-3, 5-14, 16, 17, 20, 22, 24, 25, 27, 28, 60, 61, and 66-76. Such action is earnestly requested.

Respectfully submitted,

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